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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,613	08/01/2003	Stephen S. Liu	02-8015	4774

7590 03/21/2007  
Leonard C. Suchyta  
c/o Christian Anderson  
Verizon Corporate Services Group Inc.  
600 Hidden Ridge, HQE03H01  
Irving, TX 75038

EXAMINER
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LEE, CHI HO A

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/632,613	STEPHENS S. LIU	
	<b>Examiner</b>	<b>Art Unit</b>	
	Andrew Lee	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-196 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-196 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**ANDREW C. LEE**  
**PRIMARY PATENT EXAMINER**

**Attachment(s)**

- |                                                                                                                               |                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                          | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/1/03</u> | 6) <input type="checkbox"/> Other: ____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-196 are rejected under 35 U.S.C. 103(a) as being unpatentable over Twata et al Pub. No. 2006/0155873 A1 in view of Admitted prior art page 4, para. 3 of specification.

Re Claims 1, 30, 31, 60, 64, 90, 94, 105, 109, 136, 140, 166, 167, 171, 174, fig. 2 teaches step A1 for receiving a connection request and including a QoS (a service constraint); whereby a Data processor 2 generates a request to a memory device (a requested transport constraint) based on the QoS requested; whereby by the On-Demand Path searcher 232 retrieving link state information from memory. [See 0072 +] and if path satisfy QoS requirements, connection is set up (transmitting the information over the link). Twata fails to explicitly teach that the "parsing...a bit field encoded record....to specify a supported transport constraint". However, Applicant admits that 32-bit mask-encoded record has been proposed for used as an industry standard. One skilled in the art would have been motivated to use the industry standard for conformity. Therefore, it would have been obvious to one ordinary skilled to conform to an industry standard.

Art Unit: 2616

Re Claims 2-4, 32-34, 61-63, 91-93, 106-108, 137-139, 168-170, refer to Claim 1, wherein optical, electrical, wireless, signal are intended use.

Re Claims 5-6, 35-36, 65-66, 95-96, 110-111, 141-142, 172-173, one skilled in the art would have been motivated to interconnect links with a photonic cross-connect device, DWDM, to support high bandwidth of optical transmission.

Re Claims 7, 37, 67, 97, 143, 175, refer to Claim 1, wherein the path selected includes a set of links.

Re Claims 8, 38, 68, 98, 112, 144, 176, refer to Claim 1, wherein the memory includes a topology database.

Re Claims 9, 39, 69, 99, 113-115, 145, 177 refer to Claim 1, wherein fig. 2 teaches selecting a path (a subset of links).

Re claims 10-12, 40-42, 70-72, 100-102, 116-118, 146-148, 178-180, refer to Claim 1, wherein one skilled in the art would have been motivated to compute least cost based on known methods such as SPF, Dijkstras, Bellman-Ford Vector.

Re Claims 13, 43, 73, 103, 119, 149, 181, refer to Claim 1, memory for storing a routing table.

Re Claims 14-16, 44-46, 74-76, 104, 120-121, 150-152, 184, refer to Claim 1.

Re Claims 17, 47, 77, 122, 153, refer to Claim 1, wherein fig.1 is a single node in the communication network for storing a plurality of link state databases.

Re Claims 18-20, 48-50, 78-80, 123-126, 154-156, 182, 183, 185-187, refer to Claim 1, Industry standard.

Re Claims 21-22, 51-52, 81-82, 127-128, 157-158, 188-189, one skilled in the art would have been motivated to configure the 32-bit map to any bit map size (64, 128 bits) and is dependent on the requirement of the particular OTN.

Re Claims 23, 53, 83, 129, 159, 190, refer to Claim 1, wherein QoS is bandwidth.

Re Claims 24-27, 54-57, 84-87, 130-133, 160-163, 191-194, refer to Claim 1, wherein the path avoid failed node/link and uses specified nodes/links that supports the Qos requirement.

Re Claims 28-29, 58-59, 88-89, 134-135, 164-165, 195-196, refer to Claim 1, wherein the network supports both voice and video data.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-196 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim language such as “configured” & “capable” should be deleted because it is optional language and lacks positive recitations.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 571-272-3130. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ANDREW C. LEE  
PRIMARY PATENT EXAMINER

